PTO/SB/05 (06-03)
Approved for use through 07/31/2003. OMB 0651-0032
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control nur 9138-0099115 Attorney Docket No. LITH ITY PATENT APPLICATION Gilbert Ciect Inventor TRANSMITTAL Title Semiconductor Quantum. EL9191279041IS (Only for new nonprovisional applications under 37 CFR 1.53(b)) Express Mail Lahel No Mail Stop Patent Applicatio APPLICATION ELEMENTS ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria VA 22313-1450 7. CD-RQM or CD-R in duplicate, large table or 1. Tee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) Computer Program (Appendix) 2. X Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, ell necessary) 3. X Specification [Total Pages 25 a. Computer Reader Form (CRF) (preferred arrangement set forth below) Descriptive title of the invention
 Cross Reference to Releted Applications Specification Sequence Listing on: - Stetement Regarding Fed sponsored R & D i. CD-ROM or CD-R (2 copies); or - Reference to sequence listing, a table, or a computer program listing eppendix

- Background of the Invention

- Brief Summary of the Invention c. Statements verifying identity of above copies Bnef Description of the Drewings (if filed) - Deteiled Description ACCOMPANYING APPLICATION PARTS - Claim(e) Abstract of the Disclosure 9. 🗀 10. 🗀 Assignment Papers (cover sheet & document(s)) 4. X Drawing(s) (35 U.S.C. 113) (Total Sheets 10 37 CFR 3.73(b) Statement N Power of Attorney (when there is en assignee) Oath or Declaration [Total a. | Total a Total Sheets English Translation Document (if applicable) Copies of IDS 12. Information Disclosure Statement (IDS)/PTO-1449 Citations b. Copy from a prior application (37 CFR 1.63(d)) Preliminary Amendment (for continuation/divisional with Box 18 completed) Return Receipt Postcard (MPEP 503) 14. [X] (Should be specifically itemized)
Certified Copy of Priority Document(s) i. DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) 15. (if foreign priority is claimed)
Nonpublication Request under 35 U.S.C. 122 name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 6. Application Data Sheet. See 37 CFR 1.76 17. Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-pert (CIP) of prior application No.:.... Prior application information: Examiner Art Unit:

For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or decleration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.

The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS Customer Number: OR Correspondence address below 28,529 Name Address City State Zip Code Fax Country Telephone

This obligation of informaticy & Sequired by 97 CFFT \$53.0). This information is required to obtain or refund a benefit by the public which is to file (and by the USFTO or process) an application. Conformative just promote by \$5 U.S.C. 122 and \$7 CFF. 14.1 his cellection is estimated to fast 12 minutes to complete. Including pathering, propering, and submitting its completed application form to the USFTO. Time will vary depending upon the individual case. Any common the amount of the propering counter individual case. Any common the amount of the you require to complete this form and/or supposition for reducing this brutes, should be sent to the folder information Conforce, U.S. Patent and Trademark Office, U.S. Department of Commonrop, P.O. Box 1450, Alexandris, V.A. 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND 17.1 Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandris, V.A. 22313-1450.

Name (Print/Type)

Redistration No. (Attorney/Agent) 24,583

Date

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FEE TRANSMITT	A I	Τ	Complete if Known						
LEE IKWIOMIIII	√ L	L	Application Number			er			
for FY 2003		Filing Date				herewith			
		First Named Inventor				ntor	Gilbert		
Effective 01/01/2003. Patent fees are subject to annual revi-	von.		Examiner Name						
X Applicant claims small entity status. See 37 CFR 1.27		Art Unit							
TOTAL AMOUNT OF PAYMENT (\$) 1,088.0	0		Attorney Docket No.				9138-0099US		
METHOD OF PAYMENT (check all that apply)	Т	FEE CALCULATION (continued)							
Theck Credit card Money Other None 3. ADDITIONAL FEES									
X Deposit Account:		arge Entity Small Entity							
Denosit	Fe	e ode	Fee (\$)	Fee Code	Fee (\$)		Fee Description	Fee Paid	
Account Number 070135			130	2051		Surch	harge - late filing fee or oath	1	
Deposit Account Gallagher & Kennedy, P.A.	10	52	50	2052	25		harge - late provisional filing fee or r sheet		
Name The Director is authorized to: (check all that apply)	10	53	130	1053	130		English specification		
Charge fee(s) indicated below XX Credit any overpaymen	s 18	312 2	2,520	1812	2,520	For fil	ling a request for ex parte reexamination		
Charge any additional fee(s) during the pendency of this applica	ion 18	304	920*	1804	920*	Requ	esting publication of SIR prior to niner action		
Charge fee(s) indicated below, except for the filing fee	18	805	1,840*	1805	1,840*		uesting publication of SIR after niner action		
FEE CALCULATION	- 12	251	110	2251	55	Exter	nsion for reply within first month		
1. BASIC FILING FEE	- 12	252	410	2252	205	Exter	nsion for reply within second month		
Large Entity Small Entity		253	930	2253	465	Exter	nsion for reply within third month	<u> </u>	
Fee Fee Fee Fee Fee Description Fee Pai	1 12	254	1,450	2254	725	Exte	nsion for reply within fourth month		
1001 750 2001 375 Utility filing fee 375	7 12	255	1,970	2255	985	Exter	nsion for reply within fifth month		
1002 330 2002 165 Design filing fee	1 14	101	320	2401		Notic	ce of Appeal	 	
1003 520 2003 260 Plant filing fee	11	102	320	2402			g a brief in support of an appeal		
1004 750 2004 375 Reissue filing fee		103	280	2403			uest for oral hearing		
1005 160 2005 80 Provisional filing fee	_,		1,510	1451			ion to institute a public use proceeding		
SUBTOTAL (1) (\$) 375	11	52	110	2452			ion to revive - unavoidable		
A FYED A OLD HELE FOR HOLD HELD DEIGO	 1 14	153 .	1,300	2453	650	Petiti	tion to revive - unintentional		

1005 160	2005 8	w	Provisional filing	ree	1431	1,510	1431	1,510	retition to instit	ute a public use proceeding		
		SL	JBTOTAL (1)	(\$) 375	1452	110	2452	55	Petition to reviv	e - unavoidable		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE				1453	1,300	2453	650	Petition to reviv	re - unintentional			
2. EXTRA C	LAIM	FEES	FOR UTILIT	Y AND REISSUE	1501	1,300	2501	650	Utility issue fee	(or reissue)		
	DF-		Extra Claims	below Fee Paid	1502	470	2502	235	Design issue fe	e		
Total Claims 65 -20** = 45 x 9 = 405				1503	630	2503	315	Plant issue fee	3			
Independent Claims		- 3**		42 = 168	1460	130	1460	130	Petitions to the	Commissioner		
Multiple Deper	ndent		L	140 = 140	1807	50	1807	50	Processing fee	under 37 CFR 1.17(q)		
Large Entity Fee Fee	Smali I				1806	180	1806	180	Submission of I	nformation Disclosure Stmt		
Code (\$)	Code		Fee Descrip		8021	40	8021	40	Recording each	patent assignment per number of properties)		
1202 18	2202	9	Claims in exce	ss of 20	1809	750	2809			sion after final rejection		
1201 84	2201	42	Independent cla	aims in excess of 3	1000	, 00	2000		(37 CFR 1.129)			
1203 280	2203	140	Multiple depend	dent claim, if not paid	1810	750	2810	375		onal invention to be		
1204 84	2204	42		pendent claims					examined (37 C			
			over original	patent	1801	750	2801	375	Request for Co	ontinued Examination (RCE)		
1205 18	2205	5 9	** Reissue clair and over orig	ns in excess of 20 inal patent	1802	900	1802	900	Request for ex of a design app	xpedited examination		
		712	Other fee (specify)									
SUBTOTAL (2) (\$) 713						*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)						
**or number previously paid, if greater, For Reissues, see above SUBTOTAL (3) (\$)												
SUBMITTED BY										(Complete (if applicable)		
Name (Print/Type) Thomas D. MacBlain,					Registration No. 24,583 Telephone602-530-80				88			

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USFFO to process) an application. Conditionality is governed by 38 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2th inmitudes to complete, including gathering, preparing, and submitting the completed application form to the USFFO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form andors suggestions for reducing this two-fived, should be sent to the Chief Information Officer, U.S. Peternative and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO Commissioner for Patents, P.O. Dex 1450, Alexandria, VA 22313-1450.

Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gilbert et al.

Filed:

Herewith

Title:

SEMICONDUCTOR QUANTUM CRYPTOGRAPHIC

DEVICE AND METHOD

CERTIFICATE OF MAILING BY EXPRESS MAIL

"Express Mail" mailing label number EL919127904US

I hereby certify that this correspondence, consisting of:

- Utility Patent Application Transmittal (1 page);
- 2. Fee Transmittal for FY 2003 (1 page in duplicate);
- 3. Specification (25 pages plus cover sheet);
- 4. Drawings (10 pages);
- 5. Combined Declaration and Power of Attorney form (3 pages);
- Check in the amount of \$962.00; and
- A return-receipt postcard.

are being deposited in the United States Postal Service as Express Mail in an envelope addressed to:

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

on

Date

Suzanne Shields

ane Shields

GALLAGHER & KENNEDY, P.A. Attorneys at Law 2575 East Camelback Road Phoenix, Arizona 85016-9255 Tel. No. (602) 530-8088

Fax. No. (602) 530-8500